

# ADVANCED WEB TECHNOLOGIES

## SYSTEM DESIGN

- **Requirements of the System**

- ➔ **Functional Requirements**

In order to prove the value of the platform and identify any possible lack of functionality, the application should have all the basic features of a regular web-shop. Accordingly, it has been considered that the initial appropriate set of functionalities for this project include those related to browsing and purchasing products.

The detailed behavior expected for the web-shop is described below.

In the home page all products are displayed sorted by recently. From here the user can select a category or their car's parts; then all products belonging to that category or brand will be displayed. Whenever a set of products is listed, those products on sale will be highlighted. Each product thumbnail consists of a picture of the product, its name and price, as well as a list of all color variants available. Clicking on a product thumbnail redirects the user to the product detail page, where besides name and price also a description is shown. Here the user is able to select any color or size(count). In any moment the user can add the selected product to the shopping cart, afterwards the updated cart contents and total price will be displayed.

Accessing the cart details also grants the user the possibility to change the number of units of an item or remove any particular item from the shopping cart. From here the user can choose to start the checkout process, where he is asked to fill a form with shipping information (i.e. shipping address and method) and billing information (i.e. billing address and payment data). During the checkout process the order summary (i.e. the list of purchased items and pricing details) is displayed all along and kept up to date. Right before finishing the checkout process, the user is informed of all introduced shipping and billing information as well as the order summary. Once the checkout process is finished, another summary is shown along with a successful purchase message.

The user can decide to sign up in our systems, in which case he must provide his full name, email address and a password. After signing up he is redirected to his user profile, where he can update his personal data, change his password review his previous orders in detail. While logged in, the user can choose to log out in order to become an anonymous customer. In any moment, he can log in again providing his email address and password.

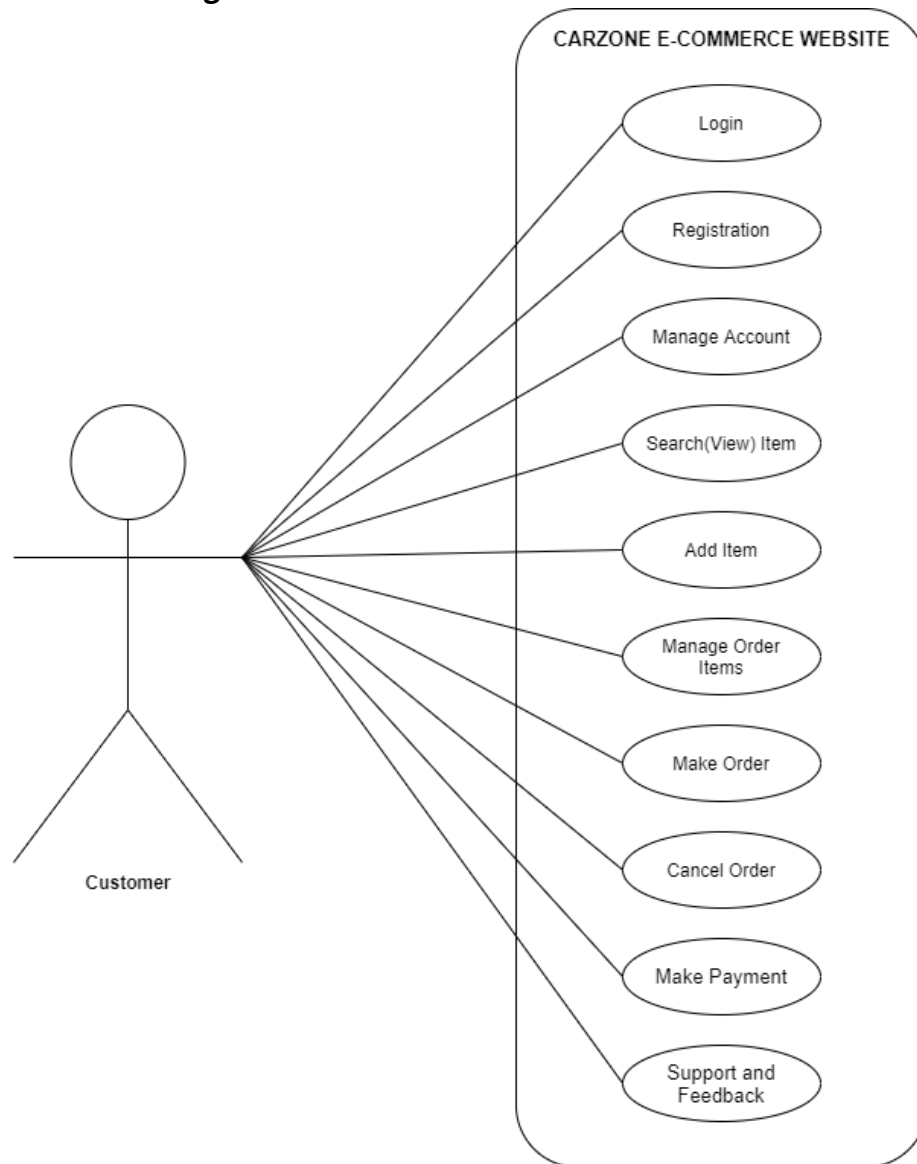
- ➔ **Non- Functional Requirements**

In its first stage, the web-shop template is required mainly to analyze the platform capabilities, show code examples to developers and attract potential customers. For this reason all nonfunctional requirements are highly focused on those areas. Other areas of great importance as well, such as compatibility and performance.

From a developer point of view the quality of the code takes a very important role, so it should be well organized, easy to understand and reusable. Therefore it would be considered a good practice to use variables and functions with self-explanatory names and keep a well commented code. To the extent possible, the generic shop logic should be separated from the most specific code in order to facilitate the use of it as a live documentation of the platform.

The platform should allow to test any web application built on top of it. In order to prove it is allowed, the template should be completed with automated functional tests, being careful of keeping these tests independent from the backend data in use. That way a change in the data, very likely to happen in a template web-shop, will not affect the results. The same principle should be applied to the code in general, to keep the template from being non-functional when the data used is different.

- **UC Diagrams**  
→ **Customer Diagram**

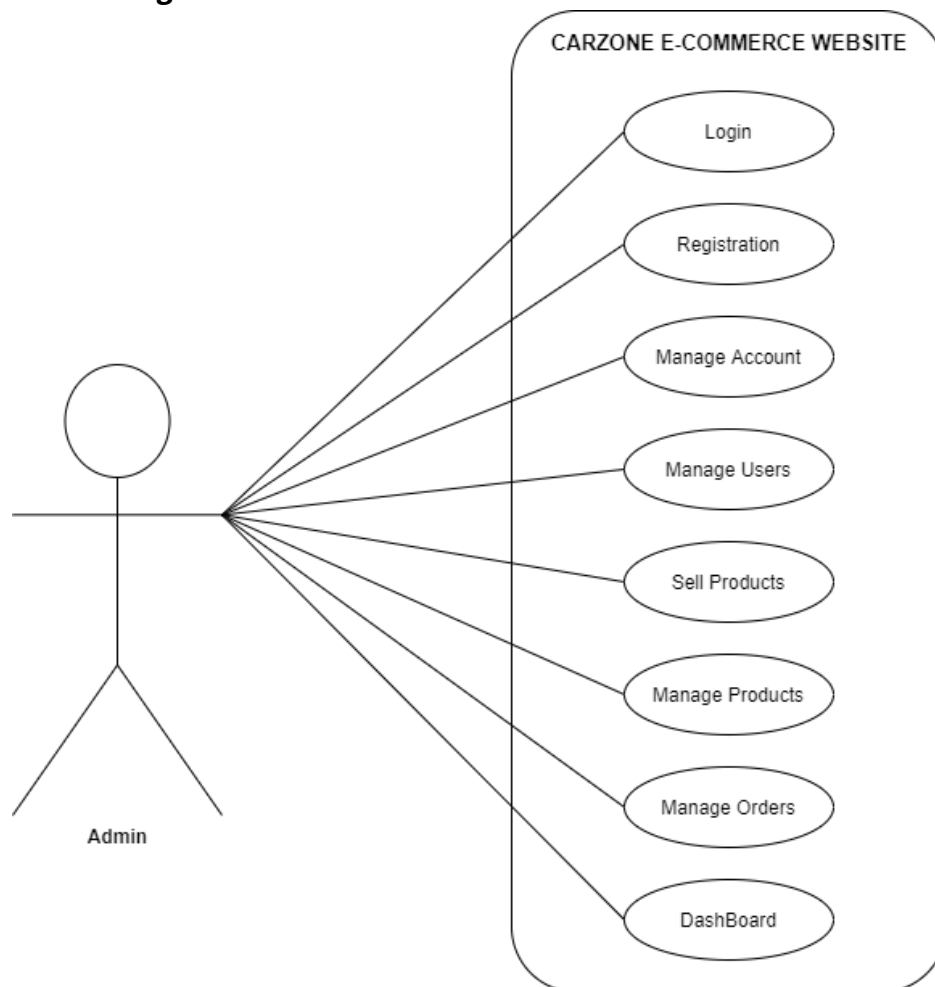


**Customer Use Case Description :**

- **Registration :** If a customer is a new user, customer can request to register page. A register page open and asks information about customer.
- **Login :** The customer can login the system by username and password. The system verifies and matches. If not matches, system gives an error message.
- **Manage Account :** The customer can manage and change own information (password-username etc.)
- **Search(View) Item :** Customer can search an item by selecting parameters or entering the name of the product. System searches in database and gives results to the customer.
- **Add Item :** Customer can add an item in to the own order. The system stores items and track the information about the product.
- **Manage Order Items :** Customer can manage own order such as deleting, increase the number of product. And system shows the each and total price of the products.

- **Make Order :** After the shopping, customer can make an order by looking each product and each price of the product.
- **Cancel Order :** If customer wants, he/she can cancel order and then can get back the money back.
- **Make Payment :** After shopping finishes and when customer confirms the own order, system directs the customer to the payment page. Customer enters bank-card information to buy the products. If informations are valid, customer can buy, if not system gives error message.
- **Support and Feedback :** Customer can get help from system admin if needs and also customer can give feedback about products, some advice etc. to the system

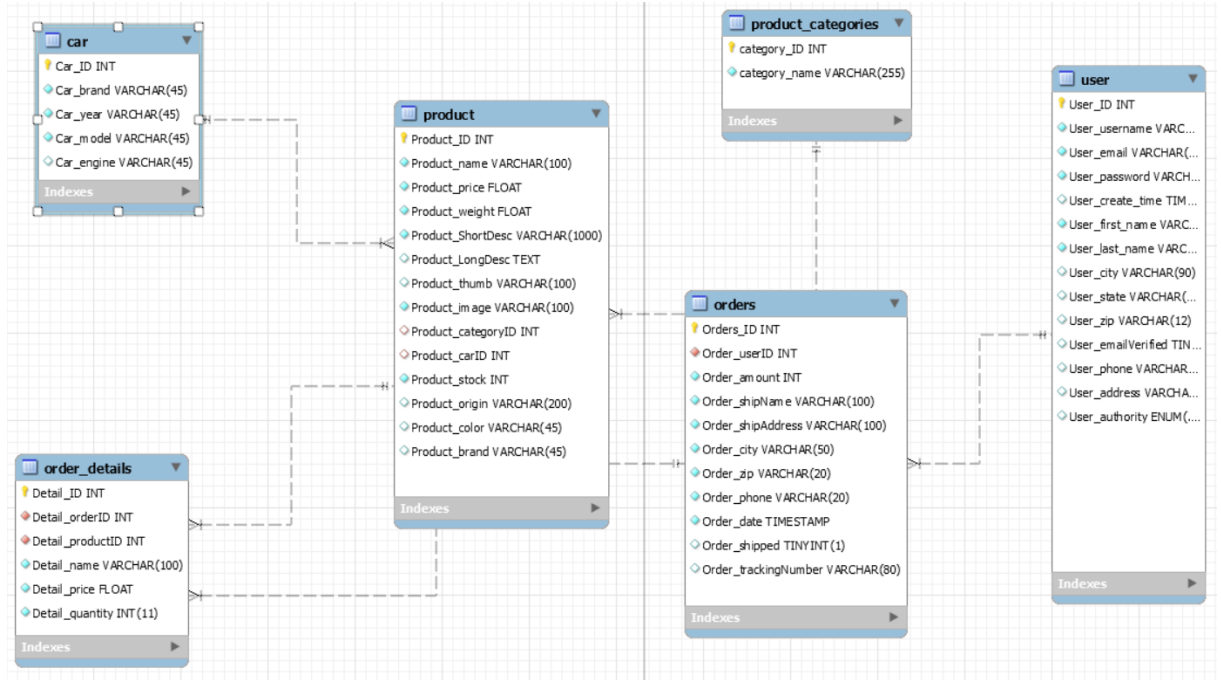
### → Admin Diagram



### Admin Use Case Description :

- **Registration :** If an admin is a new user, admin can request to register page. A register page open and asks information about admin.
- **Login :** The admin can login the system by username and password. The system verifies and matches. If not matches, system gives an error message.
- **Manage Account :** The admin can manage and change own information (password-username etc.)
- **Manage Users :** The admin can manage the users and also depends on the request of the customer, admin can help and manage.
- **Sell Products :** The admin can sell the products by website
- **Manage Products :** The admin can manage the products. He/she can add, update or delete products.

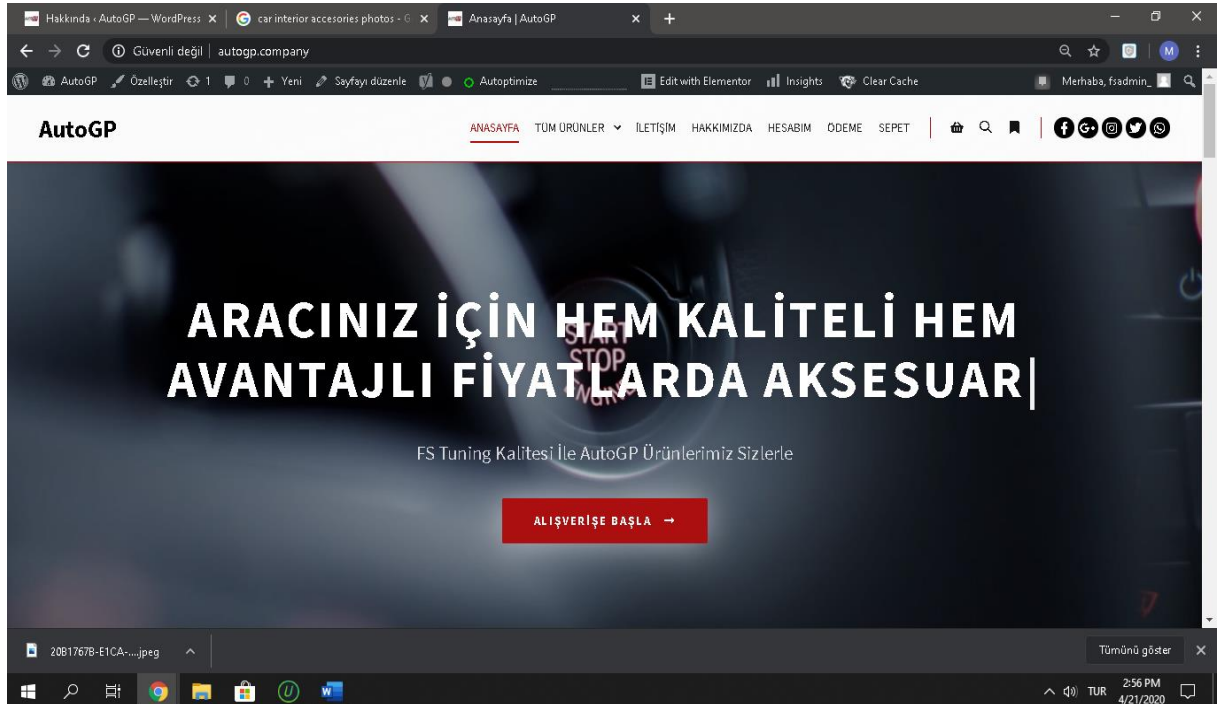
- **Manage Orders** : The admin can manage the orders which are confirmed or cancelled by the customers.
- **Dashboard** : The Dashboard provides admin direct access to important tools for faster and more convenient management.
- **Database Schema**



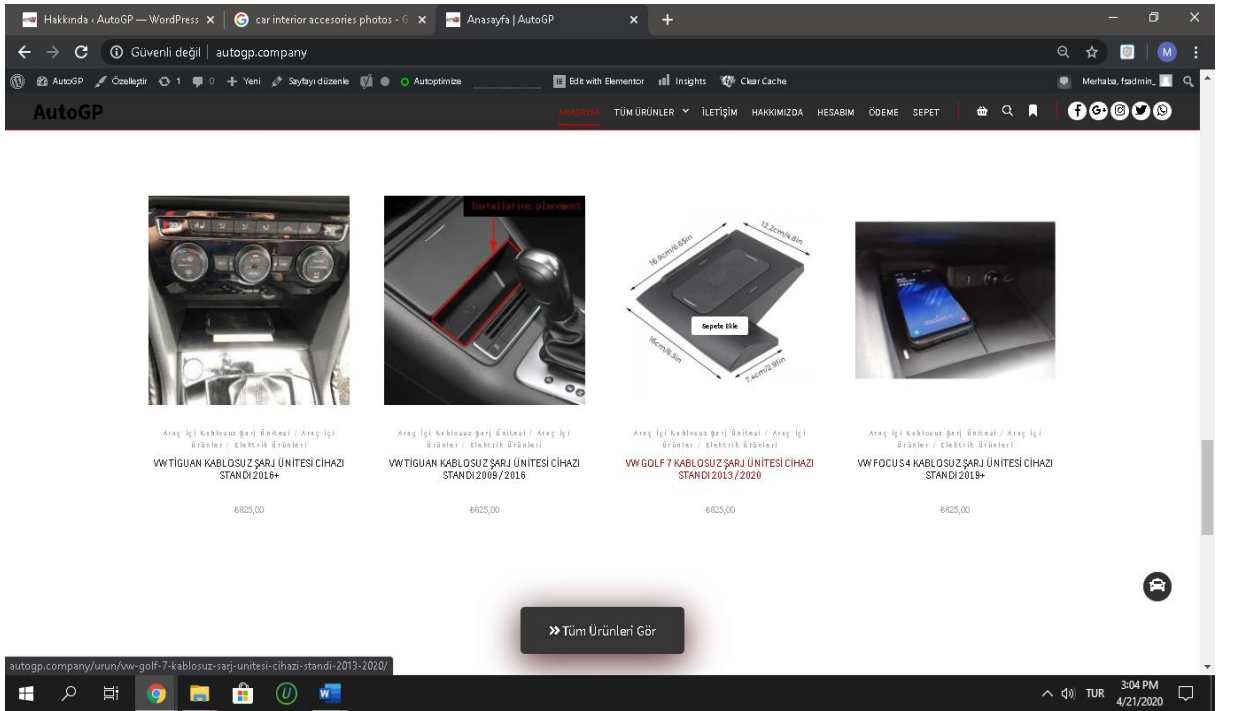
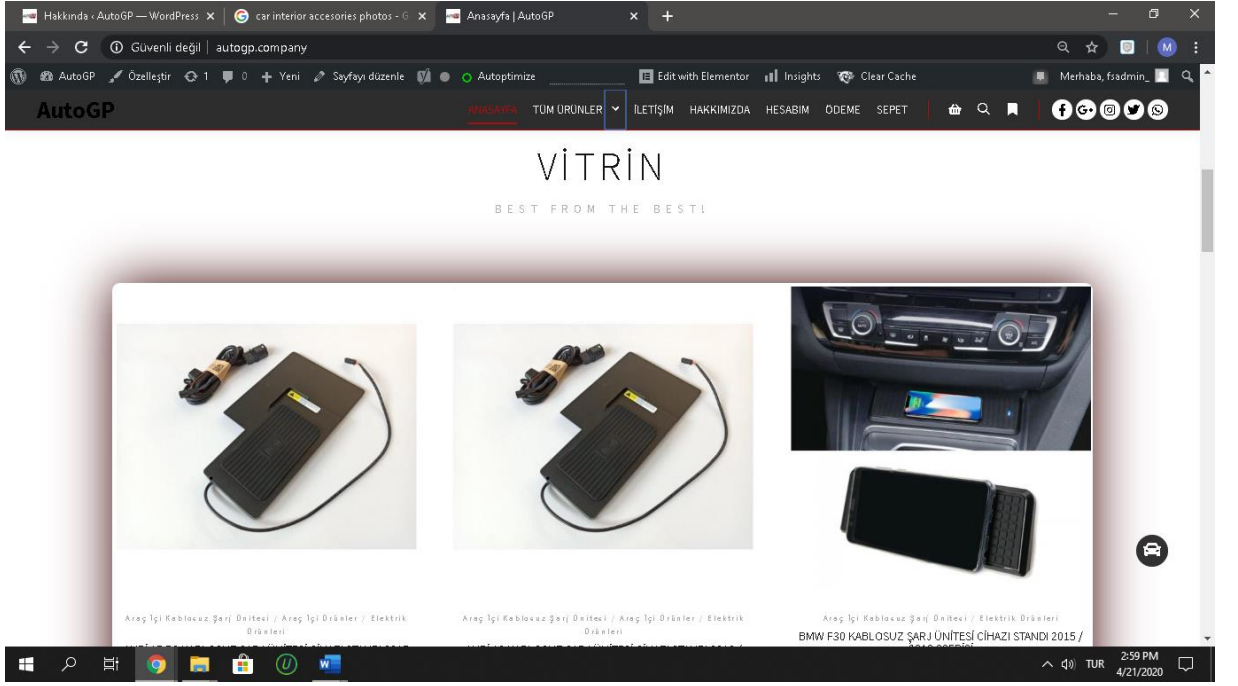
## • Prototypes

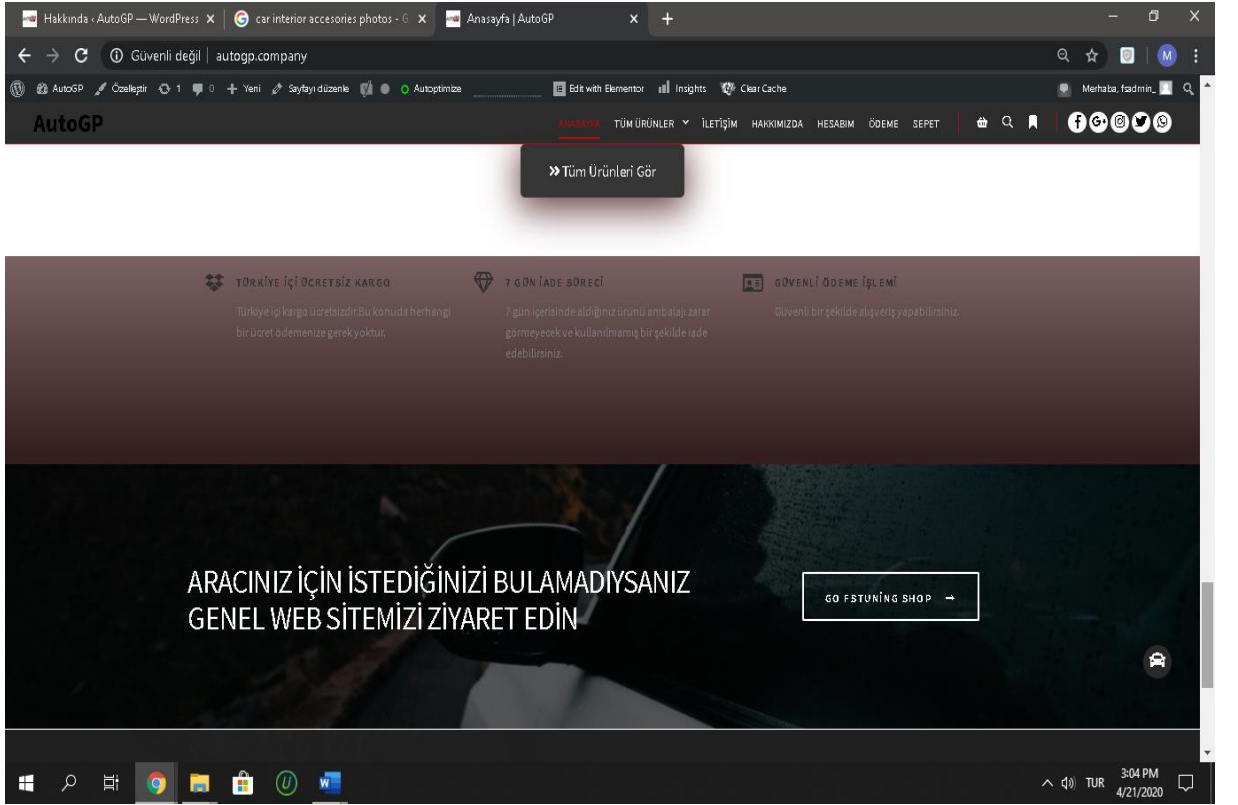
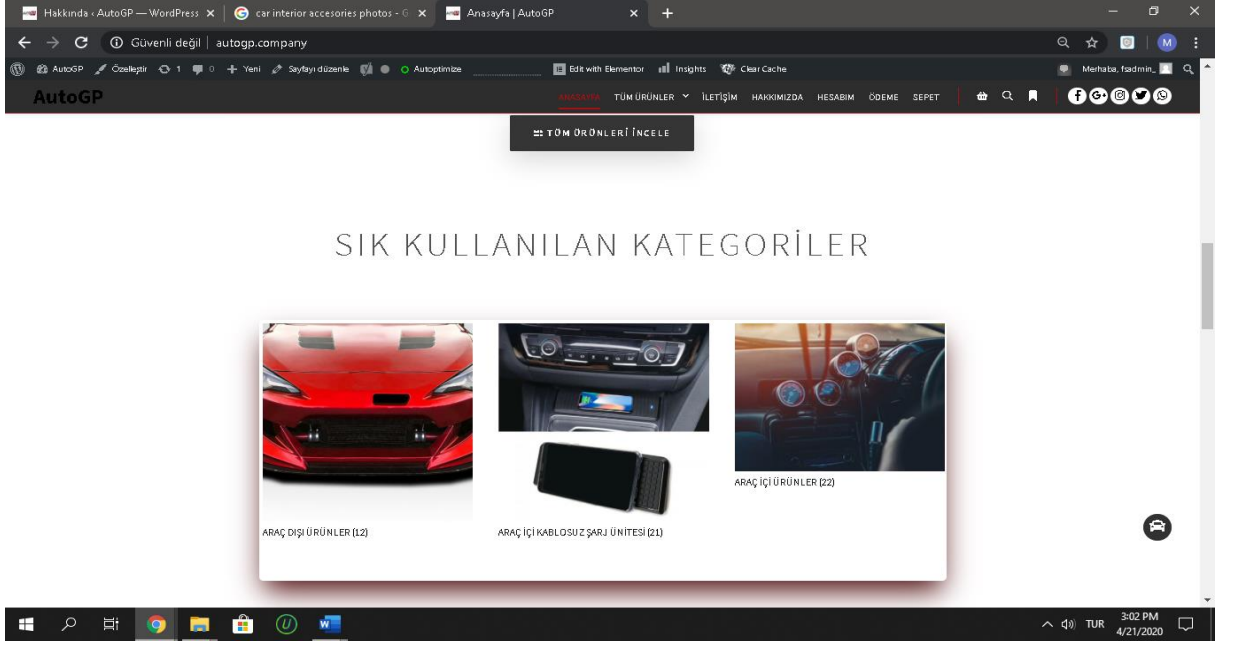
This website prototype will include the essential functionality such as products review, add products to shopping cart, purchase products so on.

➔ Picture below shows main page of the website prototype.

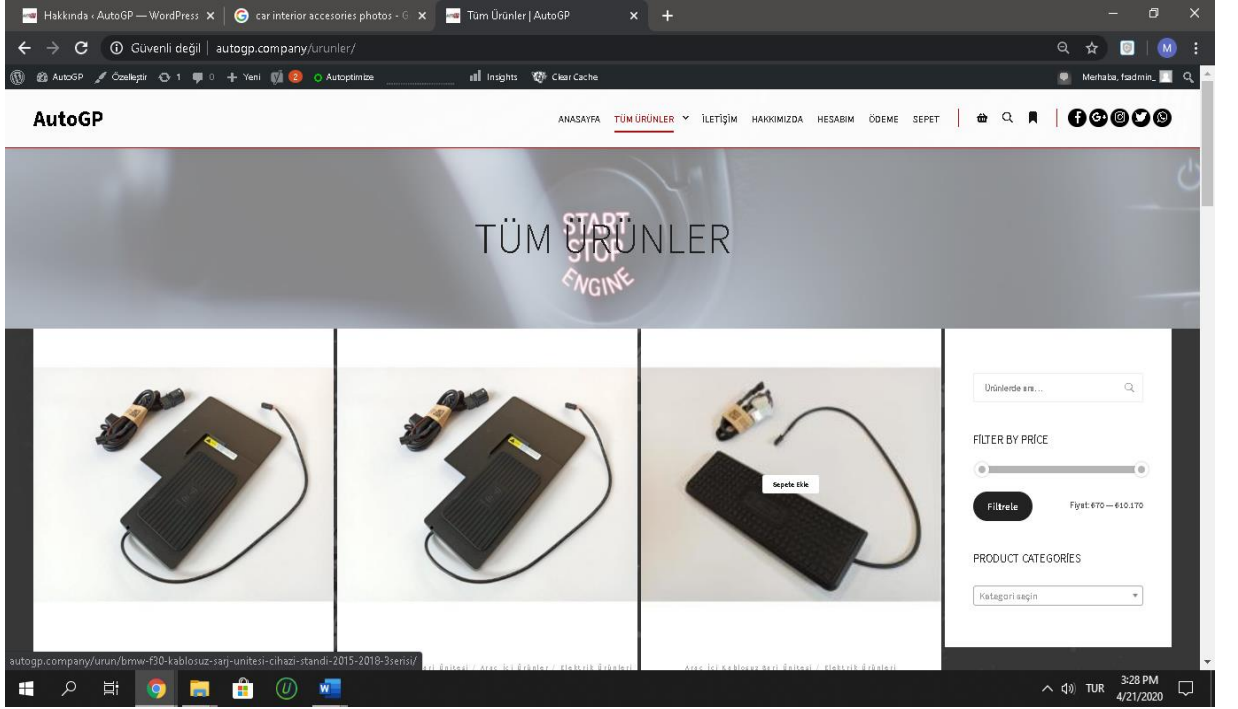
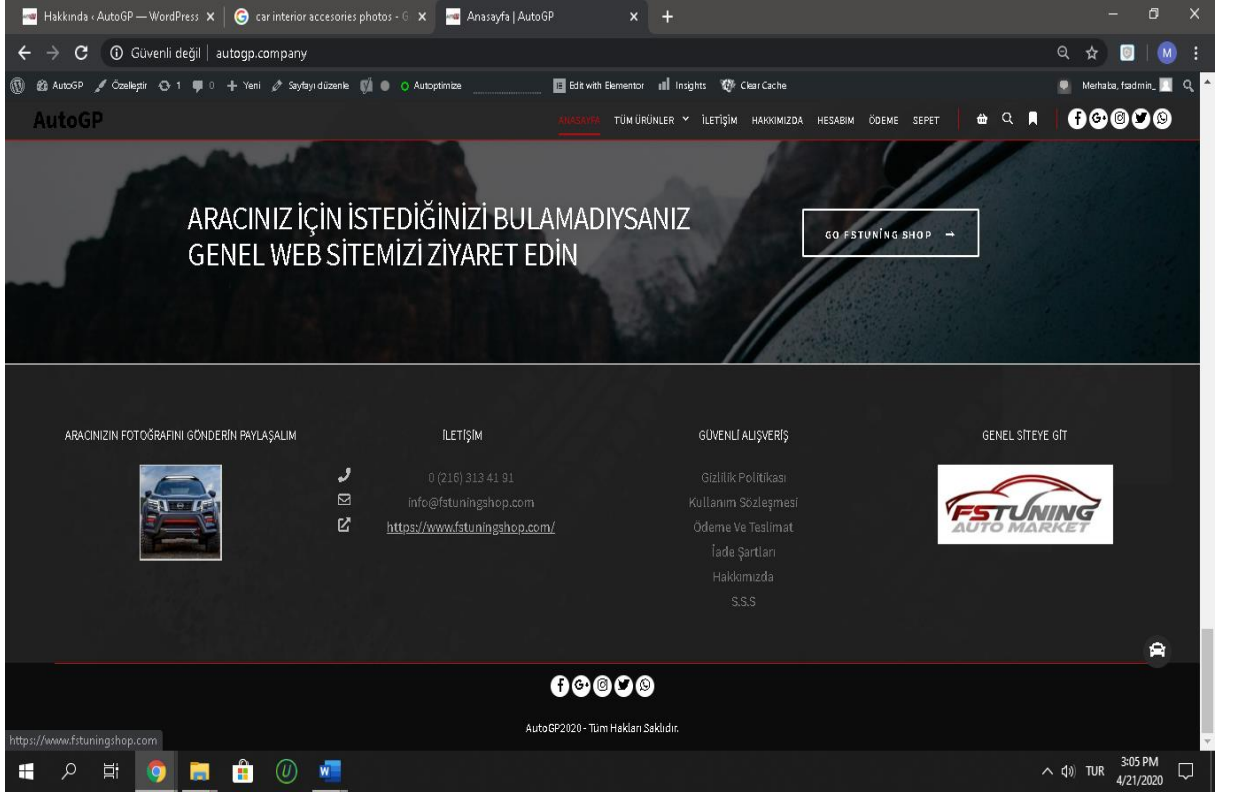


➔ Users are able to view all the products as listed by best seller or item on sales and prices of the auto parts.

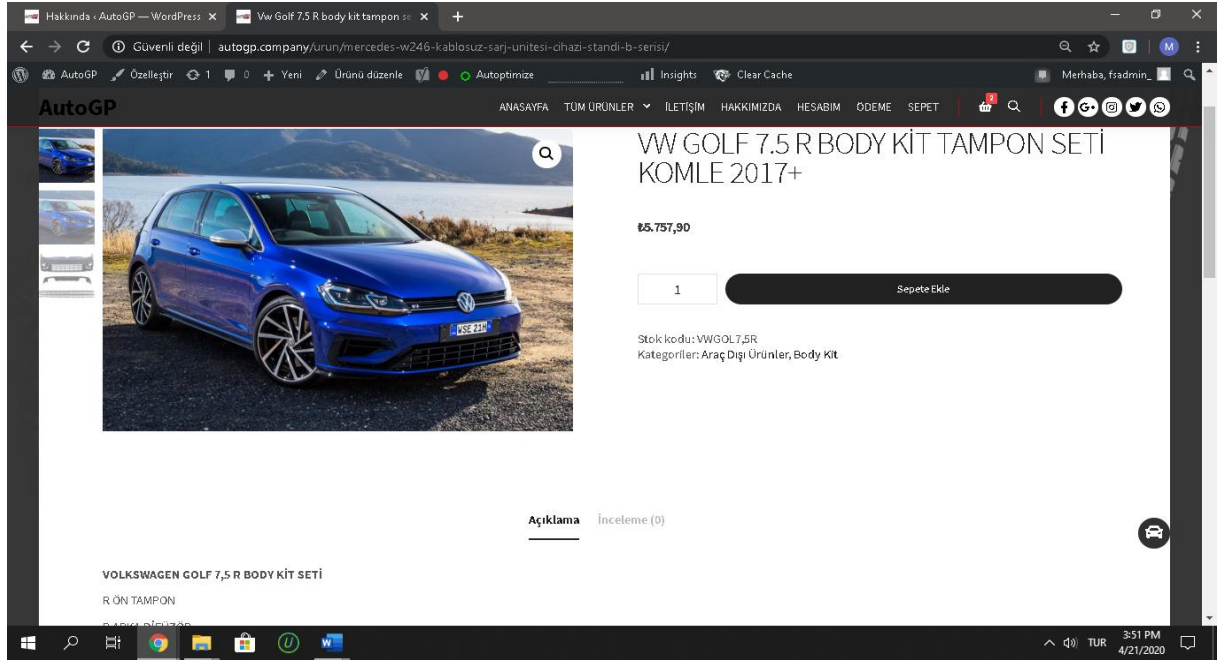




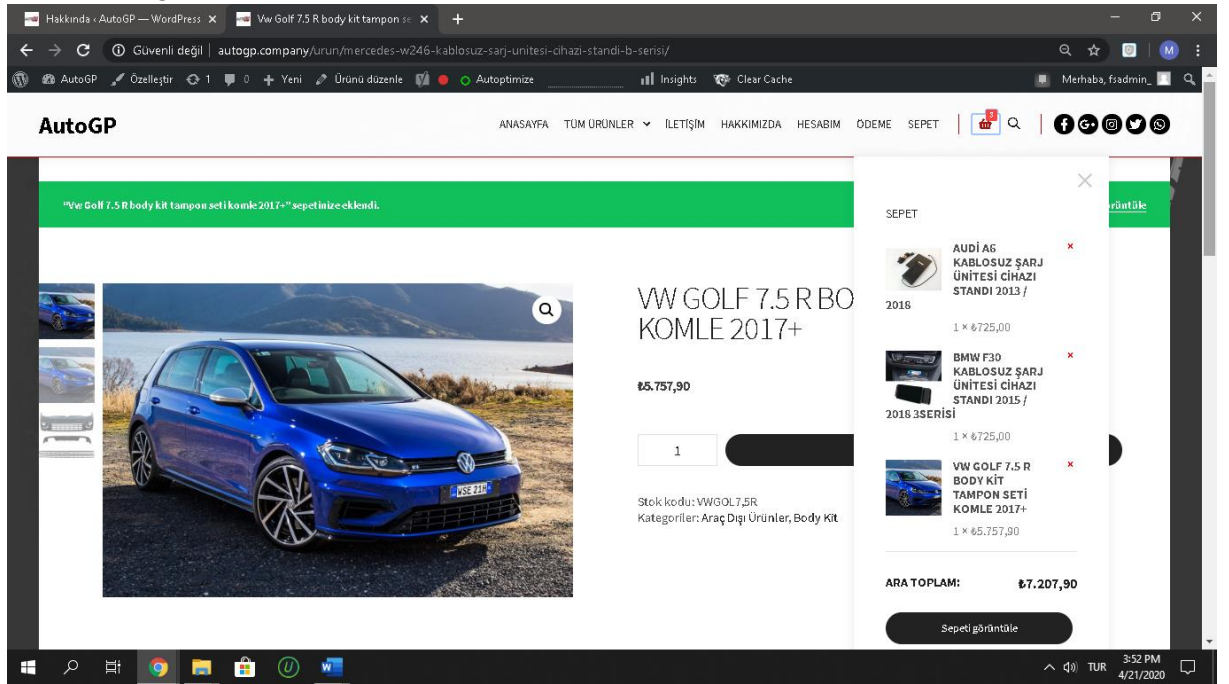




➔ As soon as user clicked on quick review as shown in diagram, it will show the product info and user can add products to cart.



➔ When user added product to cart, non-member will need to sign up and proceed to shopping cart.








→ View cart

AutoGP

ANASAYFA TÜM ÜRÜNLER İLETİŞİM HAKKIMIZDA HESABIM ÖDEME **SEPET**

## SEPET

Ürün	Fiyat	Miktar	Ara Toplam
 Audi A6 kablosuz şarj ünitesi cihazı standı 2013/2018	₺725,00	1	₺725,00
 BMW F90 kablosuz şarj ünitesi cihazı standı 2015/2018 3serisi	₺725,00	1	₺725,00
 VW Golf 7.5 R body kit tampon seti krom 2017+	₺5.757,90	1	₺5.757,90

Kupon Kodu [Kupon kullan](#) [Sepeti güncelle](#)

AutoGP

ANASAYFA TÜM ÜRÜNLER İLETİŞİM HAKKIMIZDA HESABIM ÖDEME **SEPET**

Kupon Kodu [Kupon kullan](#) [Sepeti güncelle](#)

SEPET TOPLAMLARI

**Ara Toplam** ₺7.207,90

**Gönderim**

☒ Ücretsiz gönderim

☐ Mağazadan teslim

Gönderim hedefi: [İstanbul](#)

[Adresi değiştirin](#)

**Toplam** **₺7.207,90**

[Ödeme sayfasına git](#)

## ➔ Payment

Hakkında · AutoGP — WordPress

Ödeme | AutoGP

+

← → ↻ Güvenli değil | autogp.company/odeme/

AutoGP

ANASAYFA TUM ÜRÜNLER İLETİŞİM HAKKIMIZDA HESABIM ÖDEME SEPET

ÖDEME

Kuponunuz var mı? Kupon kodunuzu girmek için buraya tıklayın

FATURA DETAYLARI

Ad \*

Soyad \*

Firma adı (isteğe bağlı)

Ülke \*

Türkiye

Sekizli adresi \*

Bina numarası ve sokak adı

Apartman, kat, daire vb.

☐ FARKLI BİR ADRESE GÖNDERİLSİN Mİ?

Siparişinizle ilgili notlar (isteğe bağlı)

Siparişiniz ile ilgili notlar örn. teslimat için özel notlar.

Windows Taskbar: 3:55 PM 4/21/2020

Hakkında · AutoGP — WordPress

Ödeme | AutoGP

+

← → ↻ Güvenli değil | autogp.company/odeme/

AutoGP

ANASAYFA TUM ÜRÜNLER İLETİŞİM HAKKIMIZDA HESABIM ÖDEME SEPET

Bmw f30 kablosuz çarç ünitesi cihazı standı 2015/2018 3serisi x1	6725,00
Vw Golf 7.5 R body kit tampon seti konik 2017+ x1	65.757,90
Ara Toplam	67.267,90
Gönderim	<input checked="" type="radio"/> Öcretli gönderim <input type="radio"/> Mağazadan teslim
Toplam	67.207,90

Benle paylaş/EFT

Ödemenizi doğrudan banka hesabımıza yapabilirsiniz. Lütfen ilgili Sipariş Numarasını Ödemenizin açıklama kısmına yazınız. Ödemeniz onaylanmadıkça siparişiniz gönderilmeyecektir.

Kişisel verileriniz siparişinizi işlemek, bu web sitesindeki deneyimlerinizi desteklemek ve gizlilik ilkesi sayfamızda açıklanan diğer amaçlar için kullanılacaktır.

Sipariş onayla

Windows Taskbar: 3:56 PM 4/21/2020

- **Framework**

- **Frontend:** HTML5, CSS3, JavaScript
- **Backend:** Django (Python Web Development Framework)
- **Database:** MySql
- **Version Control:** Github

- **Schedule of Laboratory 5-13**

- **Lab 5 :** Basic version of the web site
- **Lab 6 :** Implementation of the database
- **Lab 7 :** Search part for the products
- **Lab 8 :** Login ability for admin and customer
- **Lab 9 :** Barcode Scanning
- **Lab 10 :** Favorite Product List
- **Lab 11 :** Changing currency
- **Lab 12 :** Charts implementation
- **Lab 13 :** Test and Final Application